Los Angeles County
Department of Regional Planning

*Planning for the Challenges Ahead*

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Director

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TO: Esther L. Valadez, Chair
Laura Shell, Vice Chair
David W. Louie, Commissioner
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FROM: Connie Chung, AICP, Section Head
General Plan Development and Housing Section

**SUBJECT: LOS ANGELES COUNTY GENERAL PLAN UPDATE – FOLLOW UP ITEM**
**PROJECT NO. 02-305 (1-5)**
**DRAFT MIXED USE (MXD) ZONE ANALYSIS**

As discussed in the memo to your Commission dated July 10, 2014, attached is the staff analysis on the feasibility of densities and development standards in the draft Mixed Use (MXD) zone. At the fourth public hearing in the General Plan Update series on May 28, 2014, your Commission asked whether the proposed maximum allowable density of 150 dwelling units per net acre is feasible on parcels that are proposed to be rezoned MXD, given the development standards in the draft MXD zone.[1] As a follow-up to your question, the staff has prepared the attached analysis for your review. The analysis concludes that the proposed maximum allowable density of 150 dwelling units per net acre is feasible on parcels that are proposed to be rezoned MXD. Specifically, residential-only developments are more likely to reach the maximum allowable density than mixed use developments. Also, while lot sizes vary among parcels that are proposed to be rezoned MXD, the study of the sample sites shows that when subject to the same development standards such as height limit and FAR, unit sizes in similar types of developments at a similar density are comparable despite the variations in lot sizes.

## METHODOLOGY

This analysis focuses on four sample sites that are proposed to be rezoned MXD and located within the following communities: Del Aire, East Pasadena ï East San Gabriel, West Carson and Willowbrook. The sites are located within TODs proposed through the General Plan Update. Table 1 below shows the lot sizes of the four sample sites as well as the maximum number of units allowed at 150 dwelling units per net acre.

[1] The draft MXD zone can be found at: http://planning.lacounty.gov/generalplan/zoning.

*Table 1: Sample Sites*

| Community | Sample Site Assessor's Parcel Numbers | Net Lot Area | | Maximum Number of Units Permitted |
|---|---|---|---|---|
| | | Square feet | Acre | |
| Del Aire | 4140-003-036 | 17,933 | 0.41 | 61 |
| East Pasadena ï East San Gabriel | 5755-008-022 | 26,985 | 0.62 | 92 |
| West Carson | 7345-014-048 | 36,750 | 0.84 | 126 |
| Willowbrook | 6149-017-914 thru 917, 919, 920, 922 thru 924, 927, 929, 940, 945 & 946* | 56,000 | 1.29 | 192 |

* All parcels are owned by the Community Development Commission (CDC) and are likely to be consolidated.

On each of the four sites, the staff developed scenarios based on the standards proposed in the draft MXD zone. The building footprint, total floor area and the number of stories in each scenario comply with the applicable development standards, such as FAR of 3.0[2], height limit of 65 feet, and setbacks and step-backs if abutting Zone R-1 or R-2. Also, the following assumptions were applied to all scenarios:

- Project includes subterranean parking only;
- Unless otherwise noted in the specific scenarios, the required recreational space is provided entirely on the ground (i.e., lawns);
- The floor-to-floor height for the ground floor retail component of a mixed use development is 15 feet (to comply with the minimum 14-foot floor-to-ceiling height requirement); and
- The floor-to-floor height for all other floors is 10 feet.

For each scenario, the staff analyzed five different unit sizes to estimate the number of units that would fit within the building, and calculated the density in each example under each scenario. The five unit sizes used in these examples are based upon the unit floor plans of the Aviation Station Project, which is located in the community of Del Aire.[3] The five examples are as follow:

- Example A: All residential units are 580 square feet in size (studio).
- Example B: All residential units are 633 square feet in size (one-bedroom).
- Example C: All residential units are 864 square feet in size (one-bedroom with den).
- Example D: All residential units are 945 square feet in size (two-bedroom).
- Example E: All residential units are 1,035 square feet in size (two-bedroom).

[2] Floor Area Ratio (FAR) is the ratio of the total above-ground gross floor area of all enclosed buildings to the area of the project site. As a formula, FAR = (total above-ground gross floor area of all enclosed buildings) / (area of the project site). Also, the FAR of 3.0 only applies to mixed use developments.

[3] Approved by the Board of Supervisors in 2012, the Aviation Station project is a mixed-use, transit-oriented development consisting of 376 residential units and 17,180 square feet of commercial/retail space adjacent to the Green Line Aviation/LAX Station in the unincorporated community of Del Aire.

Once the project densities were calculated using the five unit sizes listed above, the staff then estimated the unit size under each scenario if a project is to be built at 150 dwelling units per net acre.

To account for spaces such as hallways, staircases and elevators, a 25 percent reduction is applied to the floor area when estimating the number of units on each floor. This 25 percent factor is also based upon the floor plan of the Aviation Station Project. Furthermore, the staff used a six-story residential-only development with a total floor area of 60,000 square feet as a baseline for comparison on all four sample sites (Scenario 1).[4] As the lot sizes vary, the staff adjusted the total floor area and the building envelope accordingly for all other scenarios on each site.

## OBSERVATIONS

### Del Aire

On the Del Aire sample site, the staff analyzed the following scenarios:

- Scenario 1: Six-story residential-only development with 60,000 square feet of total floor area
- Scenario 2: Four-story residential-only development with 53,740 square feet of total floor area
- Scenario 3: Six-story mixed use development with ground floor retail and upper floor residential units; 53,799 square feet of total floor area (as limited by the maximum allowable 3.0 FAR)

The following observations were made:

- At the maximum allowable density of 150 dwelling units per net acre, the units would be approximately 750 square feet in size if the total floor area of a six-story residential-only development is 60,000 square feet. Units of this size would likely be one-bedroom.

- Given the lot size and the lot configuration of this particular site, it is still feasible to reach the maximum allowable density of 150 dwelling units per net acre and comply with all applicable development standards (with the total floor area slightly reduced) even if the height of the residential-only development is reduced to 40 feet (four-story). In this case, the units would be approximately 650 square feet in size, which would likely be one-bedroom units.

- To reach 150 dwelling units per net acre in a six-story vertical mixed use development with a 3.0 FAR, the unit size would range from approximately 500 to 550 square feet. Units of this size would likely be studio units.

[4] The number of stories in Scenario 1 was set to be six due to the height limit of 65 feet, while the total floor area was set to be 60,000 square feet in Scenario 1 since 60,000 square feet is the threshold used to calculate the required recreational space according to the provisions in the draft MXD zone.

**East Pasadena – East San Gabriel**

On the East Pasadena ï East San Gabriel sample site, the staff analyzed the following scenarios:

- Scenario 1: Six-story residential-only development with 60,000 square feet of total floor area
- Scenario 2: Six-story residential-only development with 90,000 square feet of total floor area
- Scenario 3: Four-story residential-only development with 90,000 square feet of total floor area
- Scenario 4: Six-story mixed use development with ground floor retail and upper floor residential units; 80,955 square feet of total floor area (as limited by the maximum allowable 3.0 FAR)

The following observations were made:

- At the maximum allowable density of 150 dwelling units per net acre, the units would be approximately 500 square feet in size if the total floor area of a six-story residential-only development is 60,000 square feet. Units of this size would likely be studio units.

- If the total floor area of the six-story residential-only development is increased to 90,000 square feet, at 150 dwelling units per net acre, the units could increase to approximately 750 square feet in size, which would likely be one-bedroom units.

- If the height of the residential-only development is reduced to only four-story, it is still feasible to reach the maximum allowable density of 150 dwelling units per net acre with the total floor area (90,000 square feet) and the unit size (approximately 750 square feet) unchanged. However, in this case, the required recreational space cannot be provided entirely on the ground (i.e., lawns). Instead, part of the required recreational space would need to be provided in other forms that would not utilize any lot area (i.e., rooftop garden).

- To reach 150 dwelling units per net acre in a six-story vertical mixed use development with a 3.0 FAR, the unit size would range from approximately 500 to 550 square feet. Units of this size would likely be studio units.

**West Carson**

On the West Carson sample site, the staff analyzed the following scenarios:

- Scenario 1: Six-story residential-only development with 60,000 square feet of total floor area
- Scenario 2: Six-story residential-only development with 110,250 square feet of total floor area
- Scenario 3: Four-story residential-only development with 110,250 square feet of total floor area

- Scenario 4: Six-story mixed use development with ground floor retail and upper floor residential units; 110,250 square feet of total floor area (as limited by the maximum allowable 3.0 FAR)

The following observations were made:

- Since this particular site is relatively big, at the maximum allowable density of 150 dwelling units per net acre, the unit size would be as small as 350 square feet if the total floor area of a six-story residential-only development is only 60,000 square feet. If the total floor area is increased to 110,250 square feet, at 150 dwelling units per net acre, the units would be approximately 650 square feet in size. Units of this size would likely be one-bedroom.

- If the height of the residential-only development is reduced to only four-story, it is still feasible to reach the maximum allowable density of 150 dwelling units per net acre with the total floor area (110,250 square feet) and the unit size (approximately 650 square feet) unchanged. However, in this case, the required recreational space cannot be provided entirely on the ground (i.e., lawns). Instead, part of the required recreational space would need to be provided in other forms that would not utilize any lot area (i.e., rooftop garden).

- To reach 150 dwelling units per net acre in a six-story vertical mixed use development with a 3.0 FAR, the unit size would be approximately 550 square feet. Units of this size would likely be studio units.

**Willowbrook**

On the Willowbrook sample site, the staff analyzed the following scenarios:

- Scenario 1: Six-story residential-only development with 60,000 square feet of total floor area
- Scenario 2: Seven-story[5] residential-only development with 182,000 square feet of total floor area
- Scenario 3: Four-story residential-only development with 182,000 square feet of total floor area
- Scenario 4: Six-story mixed use development with ground floor retail and upper floor residential units; 182,000 square feet of total floor area (as limited by the maximum allowable 3.25 FAR[6])

The following observations were made:

- Since this particular site is relatively big, at the maximum allowable density of 150 dwelling units per net acre, the unit size would be as small as 230 square feet if the total

[5] A height bonus of five feet may be granted to achieve seven stories in this scenario due to lot consolidation.
[6] An FAR bonus of 0.25 may be granted in this scenario due to lot consolidation.

floor area of a six-story residential-only development is only 60,000 square feet. If the total floor area is increased to 182,000 square feet and an additional story is added as permitted by the lot consolidation height bonus, the units would be approximately 700 square feet in size. Units of this size would likely be one-bedroom.

- If the height of the residential-only development is reduced to only four-story, it is still feasible to reach the maximum allowable density of 150 dwelling units per net acre with the total floor area (182,000 square feet) and the unit size (approximately 700 square feet) unchanged. However, in this case, the required recreational space cannot be provided entirely on the ground (i.e., lawns). Instead, part of the required recreational space would need to be provided in other forms that would not utilize any lot area (i.e., rooftop garden).

- To reach 150 dwelling units per net acre in a six-story vertical mixed use development with a 3.0 FAR, the unit size would be approximately 600 square feet.

**FINDINGS**

Based on the review of these hypothetical examples, the staff made the following findings regarding project density:

- Residential-only developments are more likely to reach the maximum allowable density than mixed use developments, partly due to the maximum allowable FAR of 3.0, which only applies to mixed use developments. However, this could also simply be due to the fact that a portion of the total floor area in a mixed use development is dedicated to commercial uses, and when both types of developments are subject to other same development standards such as the same height limit, or the same setback and step-back requirements etc., the density of a mixed use development would naturally be lower than the density of a residential-only development of a comparable size if the unit sizes are also comparable. Otherwise, if both types of developments are of comparable sizes, to reach the maximum allowable density, the units in a mixed use development would be smaller than the units in a residential-only development.

- While the lot sizes vary among the four sample sites, when subject to the same development standards such as height limit and FAR, unit sizes in similar scenarios at a similar density are comparable despite the variations in lot sizes. For instance, at 150 dwelling units per net acre, the unit sizes range approximately 500 to 550 square feet in a six-story vertical mixed use development on the sample sites in Del Aire, East Pasadena ï East San Gabriel, and West Carson, despite the fact that these three lots are very different in sizes. Meanwhile, the unit size in the Willowbrook mixed use scenario is slightly bigger (approximately 600 square feet) because an FAR bonus of 0.25 was accounted for in this scenario due to lot consolidation.

- For the purpose of density calculation in this analysis, the examples do not take parking into consideration, since it is assumed in the analysis that all projects provide subterranean parking only, and subterranean parking does not need to be accounted for when measuring building height or calculating a projectôs FAR. If parking is provided in

an above-ground parking structure, which is subject to both the height limit and the FAR (in the case of a mixed use development), there would be less available floor area for residential units, which in turn means less units and a lower project density. Also, if surface parking is provided, there would be less buildable area and units, and thus a lower project density.

- Nonetheless, if the assumption regarding recreational space is adjusted in the examples, the densities may not be lowered after all even if the parking is above-ground instead of subterranean. That is because in most scenarios in this analysis, the required recreational space is assumed to be provided entirely on the ground (i.e., lawns etc.). However, according to the draft MXD regulations, the required recreational space can be provided in other forms that would not reduce the buildable area, such as rooftop gardens and balconies. In a mixed use development, recreational space, such as rooftop gardens and balconies, is also not subject to the 3.0 FAR limit, which leaves more floor area for the residential units.

**CONCLUSION**

Based on the findings and observations described above, the staff concludes that the proposed maximum allowable density of 150 dwelling units per net acre is feasible on parcels that are proposed to be rezoned MXD, given the development standards in the draft MXD zone. Moreover, it is also important to emphasize that this allowable density is a ***maximum***. Due to each siteôs unique site constraints, not all future projects will fully realize this maximum allowable density. Nonetheless, the staff believes that by setting the maximum allowable density to 150 dwelling units per net acre, the County will provide opportunities for a variety of mixed use developments.

MC:CC:TF/SC

Attachment 1: Draft Mixed Use (MXD) Zone Analysis